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ORIGINAL

Decision No. 69881

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

WARREN L. JACKMAN, an individual,

Complainant,

vs.

PACIFIC GAS AND ELECTRIC COMPANY, a corporation,

Defendant.

Case No. 8028
(Filed September 30, 1964)

Morgan, Beauzay & Holmes by David W. Leahy, for complainant.
F. T. Searls, John C. Morrissey and Malcolm A. McKillop, for defendant.
Martin J. Rosen, and Thomas R. Kerr, for I.B.E.W. Local 1245, intervenor.
Timothy E. Treacy, Richard A. Norton, Robert W. Hollis, for the Commission staff.

O P I N I O N

Proceeding

Complainant alleges that defendant is now engaged in the practice of furnishing and installing all portions of underground electric distribution and service systems on private property within selected customers' premises from both overhead and underground distribution systems owned by defendant. Complainant also alleges in substance, that the installations are being made without regard to the minimum safety requirements of the National Electrical Code, applicable local ordinances, and the Electrical Safety Orders of the Division of Industrial Safety; that the costs of the installations are not related to actual costs; that the installations are being done in violation of defendant's filed tariffs and that the installations are in violation of the Public Utilities Code. He

requests: (1) a cease and desist order requiring defendant to discontinue its present practice of furnishing and installing underground electric distribution and service systems within the private property lines of customers, (2) that defendant be ordered to refrain from engaging in such practice in the future, (3) that defendant be ordered to provide electrical service by connecting its facilities to those of its customers when such customer systems conform with the standards and specifications of defendant or of the National Electrical Code or applicable local ordinances, and (4) an order that defendant revise its Rules and Regulations to conform to the order which may be issued in this case.

In its answer, defendant denies all of complainant's allegations (except the one which refers to its corporate existence and principal place of business and the one which alleges that certain systems are being installed from its overhead and underground distribution systems). Defendant alleges that the complaint fails to state a cause of action and moved that the complaint be stricken.

International Brotherhood of Electric Workers, Local Union 1245, was granted leave to intervene as it is a labor organization that represents the overwhelming majority of persons who directly perform the services in the installation of overhead and underground electrical facilities.

Hearings were held on eight days during March, April and May, 1965 at San Francisco before Commissioner Bennett and/or Examiner Gillanders. Defendant, on the first day of hearing renewed its motion to strike. This motion as well as two subsequent renewals was denied and the matter was taken under submission on July 12, 1965 after receipt of opening and reply briefs.

Issues

The complaint raises three basic issues:

1. Whether the company's underground installations in certain areas of Contra Costa County are safe.

2. Whether defendant's underground installations are in compliance with its filed Electric Rules No. 15 and No. 16.

3. Whether defendant's charges for underground installations are reasonable and nondiscriminatory.

Safety

Complainant, a journeyman electrician and union official with the International Brotherhood of Electric Workers, described the installation of underground primary and secondary electric lines by defendant at the Rossmoor Leisure World project and specifically the use of common trenches to carry other utility services as well as electric lines. He testified as to the current drawn by apartments in the Rossmoor project as related to the size of service wires. It was his opinion that defendant's installations at Rossmoor are far below the safety standards to which he is accustomed.

An electrical safety engineer for the California Division of Industrial Safety, called on behalf of complainant, testified that in his opinion the cable in conduit (CIC) installed by defendant at Rossmoor was unsafe because it has not been tested to determine whether it provides sufficient mechanical protection for the conductor and that conceivably a short circuit could cause a fire or electrocute someone. He emphasized throughout his testimony that the Division of Industrial Safety has no jurisdiction over public utility installations such as defendant's at Rossmoor, and hence its electrical safety orders have no applicability.

A journeyman electrician, called on behalf of complainant, testified that a back-hoe had severed an underground primary line at Rossmoor and that if the operator had been on the machine he could have been injured. It was his opinion that a pick could penetrate the CIC. He further testified that the television cables in the common trench often fail necessitating digging into the trench. He testified that in one instance the underground primary line was exposed by soil erosion.

During the course of the proceeding, a field investigation of the Rossmoor installation was made by representatives of the parties.

A senior utilities engineer of the Commission's staff testified that based upon his limited inspection he believed the CIC installation was safe and did not present an immediate hazard. It was his opinion that certain safety aspects of the termination points of the system warranted further investigation. The staff recommended that defendant be directed to protect all primary CIC by concrete covering or planking.

Complainant's representative repeated his opinion that the installation was unsafe by Electric Safety Orders' standards. He testified that he favored further protective covering of the underground lines, discontinuance of the use of common trenches for electrical lines and a physical separation of high and low voltage cables.

As an interim measure, defendant agreed to cap all primary CIC to be installed by it at Rossmoor Leisure World where such conduit is located in trenches containing its facilities alone and from the points where such conduit leaves a common utility trench to points of connection with transformer or splice

boxes and protection by transformer pad or other concrete cover or paving would not otherwise be provided.

In areas at Rossmoor where the primary CIC has already been installed, defendant agreed to apply a similar cap from all points where the conduit commences a rise from normal trench depth to points of connection with transformers or splice boxes which are not protected by transformer pads or other concrete cover or paving, except in Units 94 and 95 in which all digging, excavation work, and landscaping have been completed.

Defendant's chief electric distribution engineer testified to the design, construction and materials used in its Rossmoor installation, and also gave his opinion of the safety of such underground construction.

His testimony can be summarized as follows:

The underground primary cables at Rossmoor are generally buried deeper than 30 inches and include built-in safety features consisting of an inner insulating layer of polyethylene, and a grounded outer shield of concentric neutral wires and outer layer of polyethylene. Many utilities have buried similar cables without conduit, including Commonwealth Edison Company of Chicago since 1936, with no reported injuries despite numerous dig-ins. Pre-assembling the cable in a plastic conduit is not considered necessary for safety, but facilitates replacement of the cable without digging a new trench. This CIC has been in use since 1962, with California utilities reporting no injuries notwithstanding a number of dig-ins. Properly shielded primary cables installed 30 inches or more below the surface are not hazardous whether buried directly or as CIC. Defendant's underground secondary cables at Rossmoor are also safe. Millions of feet

of such cables are in service but the witness had never heard of an injury because of a dig-in. He knew of no one in the utility industry considering them unsafe. Maps of the Rossmoor installations are available at the Rossmoor and company district offices to those digging in the area. Defendant has conducted some crushing and penetration tests on the CIC with favorable results. Defendant's service wires at Rossmoor are of adequate size because of load diversity and favorable environmental conditions.

Rule No. 15 and Rule No. 16

Complainant introduced eleven exhibits in support of his allegation that defendant was violating its Rule No. 15 and Rule No. 16.

A senior commercial analyst employed by defendant testified that the underground installations at Rossmoor are made pursuant to defendant's Rule 15, Line Extensions (Revised Cal. P.U.C. Sheet No. 3175-E, et seq.), under which the distribution system is installed, and Rule 16, Service Connections And Facilities On Customer's Premises (Revised Cal. P.U.C. Sheet No. 3075-E, et seq.), under which the service connections are made.

The underground line extensions of the distribution system are made under Rule 15-A which provides that defendant will construct, own, operate and maintain distribution lines along public streets and on private property across which rights of way have been obtained, and Rule 15,D.4, which provides that defendant will install, own and maintain underground extensions within real estate subdivisions and tracts.

Rule 16(B)2, provides that defendant will extend an underground service connection to a point just outside the customer's bulkhead, if the bulkhead is at, or outside, his

property line or handhole, junction box, etc., located adjacent to the property line as determined by the company. In projects such as Rossmoor, there is no definable property line for each building and, therefore, defendant builds to the bulkhead or building wall. Where there is a definable property line, as at Colony Park, defendant terminates its facilities at the property line of the customer's lot.

The record discloses that Rules 15 and 16 are subject to various interpretations as applied to the underground installations at Rossmoor Leisure World, Colony Park Townehouse and Walnut Creek Manor. It may be that these rules are not adequate to cover a modern multi-unit type of development. For example, considerable confusion developed as to whether "customer", as used in the rules, referred to the developer who applied for the installation or the ultimate buyer of the individual units. Also, the absence of defined property lines in such projects presents a situation not contemplated by the rules. Rules 15 and 16 give defendant considerable latitude in interpreting such rules to its best advantage, and the record shows it has done so.

Discrimination and Reasonableness of Charges

Complainant introduced seven exhibits which he indicated would show discrimination as between customers and that costs of certain installations were not related to actual costs of the installations. He presented no testimony nor did he cross-examine defendant's witnesses on these subjects.

On the basis of the evidence, the more important aspects of which are hereinabove discussed, the Commission makes the following findings:

1. Defendant's underground installations in Rossmoor Leisure World, Colony Park Townehouse and Walnut Creek Manor located within defendant's Diablo District, Contra Costa County are not unsafe.

2. Defendant's interpretation of its Rule No. 15 and its Rule No. 16 as applied to Rossmoor Leisure World, Colony Park Townehouse and Walnut Creek Manor is reasonable and does not violate its filed tariff schedules.

3. Defendant has not unduly discriminated between Rossmoor Leisure World, Colony Park Townehouse and Walnut Creek Manor.

4. The record fails to substantiate complainant's allegation that costs of certain installations are 'not related to the actual cost."

5. Defendant should continue to cap all primary CIC to be installed by it at Rossmoor Leisure World in the same manner as it agreed to do on an interim basis.

The Commission concludes that the complaint should be denied.

O R D E R

IT IS ORDERED that the complaint in Case No. 8028 is denied.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 2nd day of November, 1965.

Frederick B. Holoboff
President

George G. Grover

Commissioners